

aspect ratio crucible, manipulation of a gradient trim system, and incorporation of a particular heat shield assembly. Each of these innovations represent a notable deviation from the state of the art and are at least partly responsible for Applicants' achievement of the claimed sapphire single crystal. The attention of the PTO is directed to the Rule 132 Declaration for a detailed explanation of each of these features. JP '898 fails to teach or suggest such features or any other technical disclosure to enable formation of a sapphire single crystal as claimed.

For at least the foregoing reasons, Applicants submit that the presently claimed invention clearly defines over the art of record. Accordingly, reconsideration and withdrawal of the §103 rejection contained in the Final Office Action are respectfully requested.

Applicants respectfully submit that the present application is now in condition for allowance. Accordingly, the Examiner is requested to issue a Notice of Allowance for all pending claims.

Should the Examiner deem that any further action by the Applicants would be desirable for placing this application in even better condition for issue, the Examiner is requested to telephone Applicants' undersigned representative at the number listed below.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-3797.

Respectfully submitted,

Date

8/9/06

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